GLF73910-AD01
Ultra-Efficient I_QSmart™ Battery Protection IC

DESCRIPTION

The EV011 -GLF73910-AD01 evaluation board features the GLF73910-AD01 that is an I $_Q$Smart™ ultra-efficient, full battery protection IC with the accurate over charging voltage, over discharging voltage, and short circuit protections for lithium battery safety.

When the battery is charged past the over voltage detection level, the GLF73910 -AD01 switch opens in a preset delay time. As the battery voltage decreases below the over discharge detection voltage level, the GLF73910-AD01 is turned off immediately, consuming an ultra -low leakage current (I_{SD}) to save the battery. In addition, at load short conditions, the GLF7391 0-AD01 is latched off and remain the off sate in a preset delay time.

The GLF73910 -AD01 is activated by applying V $_{ON}$ to the VOUT pin from a charger or a DC power supplier.

FEATURES

- V_{OC}, Over Charge Detection: 4.35 V_{BAT}
  - Detection Delay, t_{OC} = 530 ms
- V_{OD}, Over Discharge Detection: 2.80 V_{BAT}
- Load Short Circuit Protection with Delay Time to avoid a false trigger
- 1.5 A Continuous Charging Current Capability from VOUT to VBAT Pin
- 0.4 V Battery Minimum Voltage for Charging
- Main Switch is Activated by Applying V_{ON} the VOUT Pin from Charger
- Low R_{ON} : 36 mΩ Typ. @ 3.6 V_{BAT}
- I_Q = 720 nA Typ @ 4.2 V_{BAT}
- I_{SD} = 70 nA Typ @ V_{BAT} < V_{OD}
- Latch-off at Over Discharge Detection and Short Circuit Protection. Apply V_{ON} to VOUT pin to turn on again
- Reverse Polarity Connection Protection
- 0.97 mm x 0.97 mm x 0.55 mm Chip Scale Package 4 Bumps, 0.5 mm Pitch

PRODUCT TABLE

Eval Board Ordering Info	Part Number	Top Mark	R_{ON} (Typ) V_{BAT}=3.6 V	Over Charge Voltage V_{OC}	Over Discharge voltage V_{OD}
EV011-GLF73910-AD01	GLF73910-AD01	CF	36 mΩ	4.35 V	2.80 V